





Sarah Kubus ELL Math Hoover High School Accumold

Part I: Accumold

- Located in Ankeny, Iowa
- Founded in 1985
- World's first Micro-Molder®
- 135,000 sq. ft. facility
- Molds small plastic parts for:
 - Micro-Electronics
 - Micro Optics
 - Medical parts
 - Military/Aerospace
 - Automotive Electronics

Part II: Production Workers, Materials Handler

- Production workers run machines that make small and micro parts.
- Materials Handler tracks the plastic materials that are used to make the different parts.
- To make some parts, color concentrate is mixed with plastic resin
- Accurate measurements are needed to make good parts

Part III: Defective Parts

- When production workers inspected the parts, they noted that the parts were brittle (break easily)
- What do you think happened?
- How can the materials handler solve the problem?

Part IV: Information

- 10 lbs of material was to be used
- Part specification requires
 94% plastic resin and 6%
 colorant
- The materials were mixed in the wrong ratio and will need to be mixed again.

Part V: Business Solution

- Once the mistake was identified, the materials handler was able to re-mix the blend
- Use the colorant with plastic resin instead of the colorant
- The small change in ratio is still within tolerances

Part VI: Student Solutions

- Sort out the plastic resin from the colorant
- Use ratios to determine exactly how much of the mix should be used to create the correct blend